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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/570,822	DOAN ET AL.
	Examiner	Art Unit	
	ANGELICA RUIZ	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 June 2008_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.

    4a) Of the above claim(s) _31-34_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-30_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _2/27/2008_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The Action is responsive to Applicant's amendment, filed on June 23, 2008.

2.   It is acknowledged that as a result of the amendment, Claims 1, 4, 7, 11, 13-18,

20-22, 24-28, and 30 have been amended and Claims 31-34 have been cancelled.

3.   Claims 1-30 are pending.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-30 have been considered but are

moot in view of the new grounds of rejection necessitated by Applicant's amendment of

the claims.

5.   Applicant argues in substance that the cited references, alone or in combination,

are not disclosing or suggesting the features of "(i) determining at leas one context

entity from a representation...and at leas one context entity". The Examiner respectfully

disagrees because a "directory" is a "data source" as claimed. And Szabo covers the

deficiencies that Prompt has and recites the previously mentioned features. As

disclosed in the following 35 USC § 103 rejection.

6.   The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give claims their broadest reasonable interpretation in light of

the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,

1027-28 (Fed. Cir. 1997). *Limitations appearing in the specification but not recited in the*

claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ

541,550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The

Examiner has full latitude to interpret each claim in the broadest reasonable sense. The

Examiner will reference prior art using terminology familiar to one of ordinary skill in the

art. Such an approach is broad in concept and can be either explicit or implicit in

meaning.

Specification

7.   In view of amendments to the Abstract the objection is withdrawn.

Claim Objections

8.   Claim 28 is objected because of the following informality the phrase "from said

plurality of previous view" should be corrected to "views" at the end.

9.   In view of amendments to Claims 13, 15, 17, 18, 20, and 21, the Examiner

withdraws the pending objection to mentioned claims.

Claim Rejections - 35 USC § 112

10.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior office action.

11.   In view of the amendments to the claims 11, 13, 15-18, 20, and 21 the Examiner

withdraws all pending rejections under 35 U.S.C. 112.

Claim Rejections - 35 USC § 101

12.　　The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior office action.

13.　　In view of the amendments to the claims, the Examiner withdraws all pending

rejections under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

14.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

15.　　Claims 1-9, 19, and 22-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Prompt et al (US 2006/0020586)**, in view of **Szabo et al (US

2007/0156677 A1)**.

As per Claim 1 Prompt discloses:

*- A method of presenting data from at least one data source, said method

comprising the steps of:*

(Abstract and Claim 1, "A computer-implemented method for querying relational data...")

and (Par [0029], "In accordance with the present invention, several embodiments for

presenting the data records of the virtual directory server are disclosed. In one

embodiment, the virtual directory is displayed using a browser format...").

(i) providing a representation of said at least one data source and a *plurality of previous views* ***of said at least one data source;***

(Par [0314], "...The DIT can comprise tables, entries and objects representing content and relationships captured and extracted from particular databases...By doing so, different paths of the virtual directory **represent simplified "views" to the** data, thereby allow end-users a more natural way to browse and/or search for information."), the "plurality" in "views" inherently means there are "a plurality of views" as claimed.

(ii) identifying at least one compulsory entity in said representation; and

(Par [0207], "...The relationship dialog box 2700 generally requires the source and destination tables or **views to be identified.** When creating relationships according to one embodiment in accordance with the present invention, it is typically unnecessary to specify which entity is the source and destination because the relationship represents a combination of the two entities and not necessarily any priority associated therewith."), inherently there is "at least one" entity associated with said representation.

iii) determining at least one context entity from said representation and context data obtained from said plurality of previous views

(iv) presenting a data structure comprising *said at least one compulsory entity and said at least one context entity.*

(Title, "System and method for providing access to databases via directories and other hierarchical structures and interfaces") and (Fig. 9). Explaining a view definition for flat hierarchy, complex index hierarchy, and basic index hierarchy.

However Prompt does not specifically discloses the above underlined claimed features.

On the other hand Szabo discloses the above underlined claimed features as follows:

(Par [0404], "...deeper content may be made available within the context of the tree. To obtain a separation of commercial and non-commercial content, the commercial portion of a taxonomy could be identified by an outline, a special color, or other demarcation. Thus, for example, the user may write the sentence in a clue box, "I want to buy a Durango." Using a method presented by this invention, the user may then be presented with a series of zoomed in views of a taxonomic tree...") and (Fig. 5C), showing "context entity" and the compulsory entity" as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of Szabo into the method of Prompt to include the context and compulsory entity to show an improved view of the represented data. The modification would have been obvious because one of the ordinary skills in the art would implement the representation to provide the user with an enhanced view of the data source.

As per Claim 2, the rejection of claim 1 is incorporated and further Prompt discloses:

- wherein at least one said data source is hierarchical and said data structure is hierarchical.

(Par [0159], "In one embodiment, system 100b includes the VDS application 1054 along with six modules of software according to the present invention. These six modules are described below as the first module 1058, second module 1060, third module 1056, fourth module 1062, fifth module 1064, and sixth module 1068. The first module 1058 is embodied as a program for **extracting and defining schema from any relational** data **sources** that can be reached using Object Linking and Embedding DataBase (OLE DB), Open DataBase Connectivity (ODBC), and/or Java DataBase Connectivity (JDBC) software drivers..."), "schema" being the "data structure" as claimed.

As per Claim 3, the rejection of claim 1 is incorporated and further Prompt discloses:

- wherein said representation comprises a graphical representation.

(Par [0040], "FIG. 9 is an exemplary graphical representation of a user interface for displaying directory view definitions in accordance with the present invention.").

As per Claim 4, the rejection of claim 3 is incorporated and further Prompt discloses:

- wherein said graphical representation comprises a schema representation of said at least one data source and said at least one previous view.

(Par [0050], "FIG. 19A illustrates an exemplary graphical representation of, a user interface for displaying a representation of the objects and relationships **resulting from a schema being captured in accordance with the present invention; FIG. 19B**

illustrates an exemplary shortcut menu; and FIG. 19C illustrates an exemplary toolbar,

both of which can be used to provide command selection to the user interface of FIG.

19A.") and (Par [0054], "FIG. 23A illustrates an exemplary graphical representation of a

user interface for displaying a default flat view in accordance with the present invention;

and FIG. 23B illustrates an exemplary graphical representation of a user interface for

displaying a default indexed view in accordance with the present invention.") and (Par

[0058], "FIG. 27 illustrates an exemplary graphical representation of a user interface for

defining relationships in accordance with the present invention.").

As per Claim 5, the rejection of claim 1 is incorporated and further Prompt discloses:

- wherein said context data comprises data evaluated to represent a

measure of relevance of said context entities to said compulsory entity.

(Par [0181], "The **schema manager** 1058 can also declare implicit **relationships.**

After the schema is captured 1802, undocumented primary keys and relationships, that

are implicit in the code but not appearing in the data dictionary, can be declared.") and

(Par [0192], "In order to evaluate missing relationships in the schema manager 1058,

having a working knowledge of the underlying database application on which the

schema is based is essential. Occasionally, the relationships between objects are not

captured in the schema, for example, when some links are created implicitly. This

means that the logical relationships may be present in the application, but are not

recorded within the database dictionary (i.e., system catalog). Once relationships have

been determined to be missing, these relationships can be declared from the schema

manager 1058. One manner for doing so, for example, is with the Define Relationships

command (i.e., button) 1932 of FIG. 19C. Additional details of relationships are

discussed in the section entitled Setting Relationships."). "primary keys" and

"relationships" being the "measure of relevance".

However Prompt does not specifically disclose:

- measure of relevance of said context entities to said compulsory entity.

On the other hand Szabo discloses the above claimed feature as follows:

(Par [0255], "the appearance of key words in title or key word field, or by constructs that

attempt to measure conceptual relevance semantically...") and (Fig. 14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to include the context and compulsory entity measure of relevance to show an accurate

view of the presented data . The modification would have been obvious because one of

the ordinary skills in the art would implement the representation to provide the user with

an enhanced view of the data source.

As per Claim 6, the rejection of claim 5 is incorporated and further Prompt discloses:

- wherein said context data comprises at least one associated numerical

data.

(Par [0191], "By using the **schema manager** 1058, a display name, or alias, can be created for a the primary key. The display name allows the user browsing the directory to be shown more useful information. For example, if the primary key of the Customer table is CustID with an integer attribute type, then a list of numbers will be displayed in the directory tree at run time.").

As per Claim 7, the rejection of claim 6 is incorporated and further Prompt does not disclose:

- wherein said at least one associated numerical, data comprises occurrence and joint- occurrence frequencies of entities in said representation observed in said at least one previous, view.

However Szabo discloses the above mentioned limitations as follow:

(Par [0255], "It is known in the art of search engines to rank objects according to their quality, and therefore to prioritize the objects, for example an ordered presentation, based on this quality, independent of content. The object need not be a document or text, and in fact may be, for example, a domain, record or other source. The quality factor itself may be, e.g., investment in site, frequency of visits, duration of visits, hyperlinks, or human editor's opinion of quality. On the other hand, objects may also be ranked according to their relevance to a particular problem, i.e., in content or context-sensitive manner, by such **techniques as counting the frequency of key words**...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to take advantage of frequency of occurrence. The modification would have been

obvious because one of the ordinary skills in the art would implement the frequencies

associated with the context of text to represent the closest approach and provide to the

user the most relevant data.

As per Claim 8, the rejection of claim 2 is incorporated and further Prompt discloses:

- wherein a root node of said at least one hierarchical data structure is an

ancestor node of said at least one compulsory entity in said representation.

(Par [0170], "...FIG. 13. In the example of FIE; 13, a new directory view definition is

created 1302 by specifying **the schema** to use. To do so, a default root label is

provided 1304. A specific implementation will later be described in the context of a

graphical user interface for clarity of the invention. Based on the relationships between

objects as described in the schema specified, the user is allowed to build 1306 a

hierarchy. The hierarchy should preferably be referenced, and the creation 1308 of a

label is a mechanism that works well for this purpose. Input is then received 1310 from

the user in order to provide the name of the label. Once the user input is received, the

label is created 1312 based on the user input. In response thereto, a **new node** is

added ...") and (Par [0171], "...For example, such information can include the

primary key, relationships with ancestors in the hierarchy, attributes to display, and

restrictions, among others, as will be described in more detail later. Control then passes

to step 1314, which has already been described.").

As per Claim 9, the rejection of claim 2 is incorporated and further Prompt discloses:

. wherein said at least one hierarchical data structure is assigned a score

equal to the occurrence probability of a root node given the occurrence of each of

said at least one compulsory entity.

(Par [0159], "In one embodiment, system 100b includes the VDS application 1054 along

with six modules of software according to the present invention. These six modules are

described below as the first module 1058, second module 1060, third module 1056,

fourth module 1062, fifth module 1064, and sixth module 1068. The first module 1058 is

embodied as a program for **extracting and defining schema from any relational** data

sources that can be reached using Object Linking and Embedding DataBase (OLE

DB), Open DataBase Connectivity (ODBC), and/or Java DataBase Connectivity (JDBC)

software drivers. The second module 1060 is a program that includes processes for

building virtual directory definitions using an oriented path derived from a schema for

relational data sources, and **represented by a hierarchical sub-directory** of objects in

a Directory Information Tree (DIT) structure...").

However Prompt does not discloses:

- assigned a score equal to the occurrence probability of a root node given the

occurrence of each of said at least one compulsory entity.

On the other hand Szabo discloses the claimed feature above as follow:

(Par [0074], "Various schemes can be utilized to further weight and balance the

relevancy scores derived from term frequency and term proximity. While a number

of such schemes are known, the schemes operate on the reasonable and necessary

premise that all relevant documents need to be initially identified from the collection

before a final relative relevancy score can be computed. The relative relevancy is then

calculated based on the full set of query identified documents. Thus, existing search

systems cannot effectively operate against a document collection index that, due

perhaps to size or to support parallel access, is fragmented over multiple server

systems or against multiple collection indexes that are served from multiple distributed

servers. Furthermore, to determine if the proper, consistent ranking of the full set of

query identified documents produce the **ranking scores...**").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to associate occurrence probability to the hierarchical data structure. The modification

would have been obvious because one of the ordinary skills in the art would implement

the probability to represent the closest approach and provide to the user the most

relevant data.

As per Claim 19, the rejection of claim 1 is incorporated and further Prompt discloses:

- wherein said compulsory entity represents one of:

(i) a location of one or more search keywords; and

(Par [0104], "With the model of searching, the user either knows precisely or can

ascertain via the use of attributes and keywords the item of interest. With either

technique, the user generally provides a filter to find a specific object that meets the

particular criteria by searching according to attributes. This approach provides a pattern

of direct access to data and favors a fiat hierarchy, an example of which is the White

Pages.").

(ii) a user-selected entity.

(Par [0168], "... In FIG. 14a, a user working at a client application 402 selects 1402 a

relational data source. In response to the selection made, schema extraction of the

objects and relationships is made by module 1058. In doing so, the entities in the data

source are determined 1404 based upon the selection received. Each entity that is

determined is translated 1406 to an object class...").

However Prompt does not specifically disclose "location" on the other hand Szabo

discloses the above mentioned feature as follow:

(Par [0233], "... In a further refinement, search results found through a query outside the

directory, for example through a metasearch process, can be organized under directory

headings. In this case, the directory may be queried as to whether and where it

references a web resource, and if it does, the resource(s) may be saved to that (those)

locations...".).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to associate occurrence probability and location. The modification would have been

obvious because one of the ordinary skills in the art would implement the probability to

represent the closest approach and provide to the user the most relevant data.

As per Claim 22, Prompt discloses:

A method of construction and presentation of data for a keyword searching

operation in at least one data source involving at least one search keyword, said

method comprising the steps of:

(Abstract and claim 1, "A computer-implemented method for querying relational data

through standard-based hierarchical views, comprising steps of: accessing a first server

from a client; retrieving by the first server first schema stored on at least one relational

data source; translating the first schema into second schema, wherein the second

schema includes the relational data having a hierarchy; maintaining a virtual

representation of the hierarchy; and providing the virtual representation at the client.")

and (Par [0103], "A directory can help to manage the scope of diverse information and

to facilitate the search for information via the abstraction of aggregated data. There are

at least two significant ways to use a directory, namely for searching and browsing,

each of which will now be discussed as having a strong and distinct relationship with the

way that users access for information and with the access paths that are used to obtain

the data that is needed.").

(i) constructing a graphical representation of said at least one data source

***and plurality of previous views of* said at least one data source;**

(Par [0314], "...The DIT can comprise tables, entries and objects **representing content**

and relationships captured and extracted from particular databases. The directory tree

can be fiat in one embodiment, meaning that the tree has no levels and points directly to

specific tables, entries and/or objects. In another embodiment, multilevel hierarchical

namespaces can be constructed to "reflect" the relationships that exist between the

tables, entities, and objects of the unrelated database. By doing so, different paths of

the virtual directory represent simplified "views" **to the** data, thereby allow end-users

a more natural way to browse and/or search for information.") and (Par [0050], "FIG.

19A illustrates an exemplary **graphical representation** of a user interface **for**

displaying a representation...").

(ii) identifying at least <u>one compulsory entity in said graphical representation,</u>

<u>where said compulsory entity is a node in said graphical representation</u>

<u>representing a location</u> of one or more said at least one search keyword;

(Par [0207], "...The relationship dialog box 2700 generally requires the source and

destination tables or views to be identified. When creating relationships

according to one embodiment in accordance with the present invention, it is typically

unnecessary to specify which entity is the source and destination because the

relationship represents a combination of the two entities and not necessarily any

priority associated therewith.") and (Par [0172], "...Tree is generated 1508. Each node

describes the information needed to query the database 106. Thereafter, the

definition is saved 1510 in a directory view file (i.e., the dvx file)"), inherently there is "at

least one" entity associated with said representation.

(iii) constructing at least one data structure comprising said at least one

compulsory entity and one or more context entities corresponding to at least one

search keyword, where said context entities are obtained from said graphical

representation using context data obtained from said at least one previous view;

and

(Par [0123], "...The DirectoryView Designer.TM. interface is used to construct the

objects in the virtual directory tree structure. Each object can represent a call to a

relational database system table or view. By using container objects, that is, objects that

do nothing themselves but contain references to other objects, a group of calls to

related and/or unrelated heterogeneous databases that contain related data can be

aggregated.").

(iv) presenting said at least one data structure as result of said keyword

searching operation.

(Title, "System and method for providing access to databases via directories and other

hierarchical structures and interfaces") and (Fig. 9). Explaining a view definition for flat

hierarchy, complex index hierarchy, and basic index hierarchy.

However Prompt does not specifically teaches the above underlined claimed features.

On the other hand Szabo discloses the above underlined mentioned limitation as

follows:

(Par [0428], "Many XPointers locate individual nodes in an element tree. However,

some location terms can locate more complex sets of data. For example, a string match

may locate only a portion of a node, and an XPointer containing the span location term

(called a spanning XPointer) can reference sub-resources that do not constitute whole

elements.") and (Par [0404], "...deeper content may be made available within the

context of the tree. To obtain a separation of commercial and non-commercial content,

the commercial portion of a taxonomy could be identified by an outline, a special color,

or other demarcation. Thus, for example, the user may write the sentence in a clue box,

"I want to buy a Durango." Using a method presented by this invention, the user may

then be presented with a series of zoomed in views of a taxonomic tree...") and (Fig.

5C), showing "context entity" and the compulsory entity" as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to include the context and compulsory entity to show an improved view of the presented

data. The modification would have been obvious because one of the ordinary skills in

the art would implement the representation to provide the user with an enhanced view

of the data source.

As per Claim 23, the rejection of claim 22 is incorporated and further Prompt discloses:

- wherein at least one said data source is hierarchical.

(Title, "System and method for providing access to databases via directories and other

hierarchical structures and interfaces") and (Fig. 9). Explaining a view definition for

hierarchy, complex index hierarchy, and basic index hierarchy.

As per Claim 24, being the computer readable storage medium corresponding to the

method Claim1 respectively and rejected under the same reason set forth in connection

with the rejection of Claim and further Prompt discloses:

(Par [0155], "...The instructions and/or data may **comprise code for performing any**

and/or all of **the techniques described herein.** These modules 1050-1070 are

coupled by bus 1020 to the processing unit 1010 for communication and cooperation to

provide the functionality of the system lOOb ....").

As per Claim 25, the rejection of Clairn24 is incorporated and further Prompt discloses:

- wherein at least one said data source is hierarchical and said data structure is

hierarchical

(Title, "System and method for providing access to databases via directories and other hierarchical structures and interfaces") and (Fig. 9). Explaining a view definition for flat hierarchy, complex index hierarchy, and basic index hierarchy.

As per Claim 26, being the computer readable storage medium claim corresponding to the Claim 22, the rejection of Claim 22 is incorporated and further Prompt discloses: (Par [0155], "...The instructions and/or data may comprise code for performing any and/or all of the techniques described herein. These modules 1050-1070 are coupled by bus 1020 to the processing unit 1010 for communication and cooperation to provide the functionality of the system 100b...").

As per Claim 27, the rejection of claim 26 is incorporated and further Prompt discloses:
- wherein at least one said data source is hierarchical and at least one said data structure is hierarchical

(Title, "System and method for.providing access to databases via directories and other hierarchical structures and interfaces") and (Fig. 9). Explaining a view definition for flat hierarchy, complex index hierarchy, and basic index hierarchy.

As per Claim 28, Prompt discloses:

- Computer apparatus for constructing at least one data structure from at least

one data source, said apparatus comprising

(Par [0083], "The present invention also relates to an apparatus for performing the

operations herein. This apparatus may be specially constructed for the required

purposes, or it may comprise a general-purpose computer selectively activated or

reconfigured by a computer program stored in the computer. Such a computer program

may be stored in a computer readable storage medium...") and (Par [0123], "...The

DirectoryView Designer.TM. interface is used to construct the objects in the virtual

directory tree structure. Each object can represent a call to a relational database system

table or view. By using container objects, that is, objects that do nothing themselves but

contain references to other objects, a group of calls to related and/or unrelated

heterogeneous databases that contain related data can be aggregated.").

a first constructing module configured to construct a representation of said

at least one data source and a plurality of previous view of said at least one data

source;

(Par [0182], "Additionally, the schema manager 1058 provides the option of using a

default view in place of constructing a view by using the second module 1060 (as will be

described in the next sub-section). Derived views, which are views based on one

attribute in a table (e.g., a postal code) can also be constructed using the schema

manager 1058.") and (Par [0258], "Reference is made to the block diagram of FIG. 42,

illustrating one example for implementing the second module...")

an identifying module configured to identify at least one compulsory entity

in said representation; and

(Par [0267], "Reference is now made to FIG. 5A, where one embodiment of system

100b is shown. In the embodiment of FIG. 5A, system 100b includes server 406a, which

in turn is further described in FIG. 6A as having a first module 602 and the •

SmartBrowser 604. Under the control of the first module 602, the server 406a

communicates with client computer 402a. For example, the first module 602 may be an

Internet Information Server (IIS), or equivalent web application server that operates in a

run-time environment...")

a determining module configured to determine at least one context entity from

said representation and context data obtained from said plurality of previous

views;

a second constructing module configured to construct said at least one

data structure comprising said at least one compulsory entity and one or more

context entities

(Par [0123], "...The DirectoryView Designer.TM. interface is used to construct the

objects in the virtual directory tree structure. Each object can represent a call to a

relational database system table or view. By using container objects, that is, objects that

do nothing themselves but contain references to other objects, a group of calls to

related and/or unrelated heterogeneous databases that contain related data can be

aggregated.") and (Par [0080], "... Furthermore, it has also proven convenient at times,

to refer to certain arrangements of steps requiring physical manipulations of physical

quantities **as (modules)** code devices, without loss of generality...").

However Prompt does not specifically disclose the above underlined claimed features.

On the other hand Szabo discloses the above underlined claimed features as follows:

(Par [0404], "...deeper content may be made available within the context of the tree. To

obtain a separation of commercial and non-commercial content, the commercial portion

of a taxonomy could be identified by an outline, a special color, or other demarcation.

Thus, for example, the user may write the sentence in a clue box, "I want to buy a

Durango." Using a method presented by this invention, the user may then be

presented with a series of zoomed in views of a taxonomic tree...") and (Fig. 5C),

showing "context entity" and the compulsory entity" as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

of invention was made to incorporate the teachings of Szabo into the method of Prompt

to include the context and compulsory entity to show a better view of the presented

data. The modification would have been obvious because one of the ordinary skills in

the art would implement the representation to provide the user with an enhanced view

of the data source.

As per Claim 29, the rejection of claim 28 is incorporated and further Prompt discloses:

- wherein at least one said data source is hierarchical and said at least one

data structure is hierarchical.

(Par [0083], "The present invention also relates to an apparatus for performing the

operations herein. This apparatus may be specially constructed for the required

purposes, or it may comprise a general-purpose computer selectively activated or

reconfigured by a computer program stored in the...") and (Title, "System and method

for providing access to databases via directories and other hierarchical structures and

interfaces") and (Fig. 9). Explaining a view definition for hierarchy, complex index

hierarchy, and basic index hierarchy.

As per claim 30, being the apparatus claim corresponding to the method of claim 22,

respectively and rejected under the same reason set forth in connection of the rejection

of Claim 22 and further Prompt discloses:

(Par [0083], "*The present invention also relates to an apparatus* for performing the

operations herein. This apparatus may be specially constructed for the required

purposes, or it may comprise a general-purpose computer selectively activated or

reconfigured by a computer program stored in the computer...") and (Par [0080], "...

Furthermore, it has also proven convenient at times, to refer to certain

arrangements of steps requiring physical manipulations of physical quantities as

(modules) code devices, without loss of generality...").

Allowable Subject Matter

16.   Claims t0-18 and 20- 21, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17.   Claims 10-18 and 20-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

18.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19.   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ANGELICA RUIZ whose telephone number is (571)270-

3158. The examiner can normally be reached on 8:00 a.m. to 4:30 p.m., ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mohammad Ali can be reached on (571) 272-4105. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Angelica Ruiz
Examiner
Art Unit 2169

/Jean M Corrielus/

Primary Examiner, Art Unit 2162